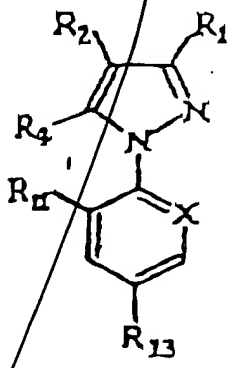
PATENT
454313-2339

IN THE CLAIMS

5 --X. (Twice Amended) A synergistic [C]composition for long-lasting protection against fleas on [small] mammals comprising synergistic amounts of at least one compound (A) of [belonging to] the formula [(I)],



(I)

in which:

R_1 is CN or methyl or a halogen atom;

R_2 is $S(O)_nR_3$ or 4, 5-dicyanoimidazol-2-yl or haloalkyl;

R_3 is alkyl or haloalkyl;

R_4 represents a hydrogen or halogen atom; or a radical NR_5R_6, $S(O)_mR_7$, $C(O)R_7$, $C(O)O\text{-}R_7$, alkyl, haloalkyl or OR_8 or a radical - $N{=}C(R_9)\ (R_{10})$;

R_5 and R_6 independently represent a hydrogen atom or an alkyl, haloalkyl, C(O)alkyl, alkoxycarbonyl or $S(O)_r\text{-}CF_3$ radical; R_5 and R_6 may together form a divalent alkylene radical which may be interrupted by one or two divalent hetero atoms [such as oxygen or sulphur];

R_7 represents an alkyl or haloalkyl radical;

R_8 represents an alkyl or haloalkyl radical or a hydrogen atom;

R_{10} represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or groups such as OH, -O-alkyl, S-alkyl, cyano or alkyl;

R_{11} and R_{12} represent, independently of each other, a hydrogen or halogen atom, or optionally CN or NO_2;

R_{13} represents a halogen atom or a haloalkyl, haloalkoxy, $S(O)_qCF_3$ or SF_5 group;

m, n, q and r represent, independently of each other, an integer equal to 0, 1 or 2;

X represents a trivalent nitrogen atom or a radical C-R_{12}, the other three valency positions of the carbon atom forming part of the aromatic ring;

with the proviso that when R_1 is methyl, then R_3 is haloalkyl, R_4 is NH_2, R_{11} is Cl, R_{13} is CF_3 and X is N; or R_2 is 4, 5-dicyanoimidazol-2-yl, R_4 is Cl, R_{11} is Cl, R_{13} is CF_3 and X is =C-Cl;

and a synergistic amount of at least one ovicidal compound (B), of insect growth regulator (IGR) type, in a fluid vehicle which is acceptable to the animal and suitable for local application to the skin.

Claim 8, line 3, after "pyrazole" insert --, commonly known as Fipronil--.

Claim 9, line 3, after "pyrazole" insert --, commonly known as Fipronil--.

Claim 31, line 3, after "pyrazole" insert --, commonly known as Fipronil--.

Cancel claims 38 to 48 and 59, without prejudice, and add the following new claims.

--60. A synergistic composition for the long lasting protection against fleas and ticks on mammals which comprises synergistic effective amounts of Fipronil and a compound which mimics juvenile hormones.

2 ~~61.~~ The synergistic composition according to claim ~~60~~ 1 wherein the compound which mimics juvenile hormones is selected from the group consisting of azadirachtin, diofenolan, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, tetrahydroazadirachtin and 4-chloro-2-(2-chloro-2-methyl-propyl)-5-(6-iodo-3-pyridylmethoxy) pyridizine-3(2H)-one.

3 ~~62.~~ The synergistic composition according to claim ~~60~~ 1, wherein the compound which mimics juvenile hormones is methopren or pyriproxyfen.

4 ~~63.~~ The synergistic composition according to claim ~~60~~ 1, wherein the compound which mimics juvenile hormones is methopren.

49 ~~52~~ ~~64.~~ A method for controlling fleas and ticks on mammals over a long duration of time which comprises locally applying to the skin of said mammal a synergistically effective amount of a synergistic composition according to claim ~~1~~ 5.

50 ~~65.~~ The method according to claim ~~52~~ 49 ~~64~~, wherein the mammals are cats and dogs.

~~54~~ 51 ~~66.~~ The method according to claim ~~52~~ 49 ~~64~~ wherein, the dose of the composition is from 1 to 20 mg/kg of compound (A) and 1 to 30 mg/kg of compound (B).

~~52~~ ~~67.~~ The method according to claim ~~52~~ 49 ~~64~~, wherein it contains a dose of from 0.1 to 40 mg/kg of compound (A) and from 0.1 to 40 mg/kg of compound (B).

53 ~~68.~~ The method according to claim ~~52~~ 49 ~~64~~, wherein it contains a dose of from 1 to 20 mg/kg.

~~69.~~ The method according to claim 52 ~~64~~, wherein the ~~synergistic~~ composition is a "spot-on" type.

54 ~~70.~~ The method of claim ~~52~~ 49 ~~64~~ wherein in the compound R_1 is CN.

38

55 71. The method of claim 52 49 wherein in the compound R_{13} is haloalkyl.

56 72. The method of claim 52 49 wherein in the compound R_{13} is CF_3.

57 73. The method of claim 52 49 wherein in the compound R_2 is $S(O)_nR_3$.

58 74. The method of claim 52 49 wherein in the compound n=1 and R_3 is methyl, ethyl or CF_3.

59 75. The method of claim 52 49 wherein in the compound n=0 and R_3 is CF_3.

60 76. The method of claim 49 wherein in the compound X is C-R_{12} and is a halogen atom.

61 77. The method of claim 52 49 wherein in the compound R_1 is CN, and/or R_3 is haloalkyl, and/or R_4 is NH_2, and/or R_{11} and R_{12} are, independently of each other, a halogen atom, and/or R_{13} is haloalkyl.

62 78. The method according to claim 52 49, wherein the synergistic composition comprises synergistic effective amounts of Fipronil and a compound which mimics juvenile hormones.

63 79. The method according to claim 62 78, wherein the compound which mimics juvenile hormones is selected from the group consisting of azadirachtin, diofenolan, fenoxycarb, hydroprene, kinoprene, methoprene, pyriproxyfen, tetrahydroazadirachtin and 4-chloro-2-(2-chloro-2-methyl-propyl)-5-(6-iodo-3-pyridylmethoxy) pyridizine-3(2H)-one.

64 80. The method according to claim 62 78, wherein the compound which mimics juvenile hormones is methopren or pyriproxyfen.

65 81. The method according to claim 62 78, wherein the compound which mimics juvenile hormones is methopren.

66 82. The method according to claim 52 49, wherein the duration is two months.

39